Remarks by Secretary Samuel W. Bodman U.S. Department of Energy

Before the Committee on Science U.S. House of Representatives

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Chairman Boehlert, Congressman Gordon, members of the Committee, thank you for welcoming me back, this time in my new role as Secretary of Energy. I am grateful for the opportunity to discuss the President's fiscal year 2006 budget for science at the Department of Energy.

I come before you this morning with tremendous enthusiasm for the Department's mission to maintain and enhance America's leadership in science and technology.

That responsibility is best illustrated by the Department's Office of Science stewardship of our nation's scientific infrastructure through a system of 10 world-class National Laboratories. In addition to the Office of Science, the Department has a robust research-and-development portfolio extending across our programs in fossil energy, nuclear energy, renewable energy, energy efficiency, environmental management and national security.

The Department is the single largest supporter of research in the physical sciences, and as such, we have a special and particularly important role in this field of scientific endeavor.

The budget request for the Office of Science of \$3.5 billion maintains a solid foundation for scientific discovery. In light of the emphasis that this Budget places on deficit control, this level of funding for the Office of Science signals a strong commitment on the part of the Administration to invest in the promise of basic research for discoveries that leapfrog today's technology.

The priorities we have set are clear. Through the 2006 Budget, we will fully support Presidential initiatives in fusion and hydrogen, we will continue strong support for other Administration priorities such as nanotechnology and information technology, we will complete ... on time and within budget ... unique scientific facilities that will maintain and enhance research in areas we believe offer the greatest potential for broad advances in future energy technologies. These scientific facilities were prioritized in our 20-year facilities outlook, announced in November 2003.

We will continue moving ahead with our FreedomCAR research and the President's Hydrogen Fuel Initiative to develop hydrogen-fueled vehicles and the infrastructure to support them. We are also carrying forward with U.S. participation in the International Thermonuclear Experimental Reactor project to pursue the potential of energy from nuclear fusion.

One of the biggest science stories of the year 2006 will be the start-up of the Spallation Neutron Source at our Oak Ridge National Lab, which will provide the most intense neutron beam in the world for cutting-edge research.

Our FY 2006 budget will also bring four of our five nanoscale science research centers on line, providing tools found nowhere else in the world for exploration at the atomic level, offering huge potential for the discovery of entirely new ways to build materials.

We are fully funding construction of the Linac Coherent Light Source at the Stanford Linear Accelerator Center, a machine that will produce x-rays 10 billion times brighter than any existing x-ray source on Earth. When it comes on line in 2009, it essentially will allow stop-action photography of atomic motion. Just ask the pharmaceutical industry what they could do with a machine that shows them how the chemical bond forms *during* a chemical reaction.

The Office of Science also will fully fund the National Energy Research Scientific Computing Center, a key center for capacity supercomputing used by roughly 2,000 researchers every year, and a separate open-access leadership class computing facility focused on providing the capability to carry out a limited number of massive simulations not possible on any other civilian supercomputer in the U.S.

The Department will also expand research underpinning biotechnology solutions to the world's energy challenges and research supporting the President's climate change science program.

Our research programs in high energy physics continue to receive strong support. We have enhanced funding for future accelerators such as the Large Hadron Collider, scheduled to begin operation in 2007, and the proposed International Linear Collider, which is now in an early R&D phase. Our nuclear physics program will continue to offer world-class facilities for use by thousands of researchers from around the world.

While this hearing focuses on civilian science and technology programs that are authorized by this Committee, I want to note that significant contributions to science also occur at the National Nuclear Security Administration's nuclear weapons laboratories, which are under the jurisdiction of the Armed Services Committee. Work at the weapons laboratories primarily focuses on stockpile stewardship, and the Office of Science and the NNSA work together on a number of activities.

The President's budget request for the Office of Science allows us to build on the solid foundation created over the last four years, propels us into new areas of scientific leadership, and maintains America's leadership in science.

I would be happy to answer your questions.